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UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

FUZZYSHARP TECHNOLOGIES INCORPORATED,

Plaintiff,

VS.

3D LABS INC., LTD.,

Defendant.

Case No: C 07-5948 SBA

ORDER GRANTING DEFENDANT'S MOTION FOR SUMMARY JUDGMENT

Docket 60

Plaintiff Fuzzysharp Technologies Incorporated ("Fuzzysharp") brings the instant patent infringement action against Defendant 3D Labs Inc., Ltd. ("3D") under the Patent Act. The Court has original jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338. The parties are presently before the Court on Defendant's Motion for Summary Judgment of Invalidity under 35 U.S.C. § 101 for Non-Patentable Subject Matter (Docket 60). Having read and considered the papers filed in connection with this motion and being fully informed, the Court hereby GRANTS the motion for the reasons set forth below. The Court, in its discretion, finds this matter suitable for resolution without oral argument. See Fed.R.Civ.P. 78(b).

I. BACKGROUND

There are two patents at issue in this case: U.S. Patent No. 6,172,679 ("the '679 Patent") and U.S. Patent No. 6,618,047 ("the '047 Patent"), which is a continuation of the '679 Patent. The patents were assigned to Fuzzysharp by its President, Dr. Hong Lip Lim, the inventor. (See Pl.'s Claim Construction Stmt. at 1-2.) Both patents are entitled "Visibility Calculations for 3D Computer Graphics," and are directed to improving 3D computer graphics "through provision of an improved method for performing visibility calculations." (Baker Decl. Ex. A at 2:18-21 ('679 Patent); Ex. B at 2:21-24 ('047 Patent). The claims in both

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| patents are "method" or "process" claims drawn to mathematical algorithms that can be used to |
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| reduce the number of calculations required to determine whether a 3D surface is visible or |
| invisible on a display screen. (Pl.'s Opp'n at 5-6.) According to Fuzzysharp, reducing the |
| number of calculations decreases the processing time necessary to form a digital image, |
| thereby enhancing the speed with which the image can be displayed. (Id.) |

On November 26, 2007, Fuzzysharp filed the instant action accusing 3D of infringing the '679 and '047 Patents. At issue in this action are: Claims 1 and 12 of the '047 Patent; and Claims 1, 4 and 5 of the '679 Patent. Claims 1 and 12 of the '047 Patent state:

- 1. A method of reducing the visibility related computations in 3-D computer graphics, the visibility related computations being performed on 3-D surfaces or their sub-elements, or a selected set of both, the method comprising:
 - [a] *identifying grid cells* which are under or related to the projections or extents of projections associated with at least one of said 3-D surfaces or their sub-elements;
 - [b] *comparing data* associated with said at least one of 3-D surfaces or their sub-elements with stored data associated with the grid cells;
 - [c] determining which of said at least one of 3-D surfaces or their subelements is always invisible or always visible to a viewpoint or a group of viewpoints by projection based computations prior to a visibility computations; and
 - [d] *ignoring* said determined at least one of the 3-D surfaces or their subelements during said visibility computation.

* * *

- 12. A method of reducing a step of visibility computations in 3-D computer graphics from a perspective of a viewpoint, the method comprising:
 - [a] computing, before said step and from said perspective, the visibility of at least one entity selected from 3-D surfaces and sub-elements of said 3-D surfaces, wherein said computing step comprises:
 - [i] *employing* at least one projection plane for generating projections with said selected set of 3-D surfaces and said sub-elements with respect to said perspective;
 - [ii] *identifying* regions on said at least one projection plane, wherein said regions are related to the projections associated with said selected 3-D surfaces, said sub-elements, or bounding volumes of said 3-D surfaces or said sub-elements;
 - [iii] updating data related to said regions in computer storage; and

[b] *deriving* the visibility of at least one of said 3-D surfaces or said sub-elements from the stored data in said computer storage; and

skipping, at said step of visibility computations, at least an occlusion relationship calculation for at least one entity that has been determined to be invisible in said computing step.

(<u>Id.</u> Ex. B, 27:66-28:16, 28:65-29:21 (emphasis added).)

Claims 1, 4 and 5 of the '679 Patent state as follows:

1. A method of reducing the complexity of visibility calculations required for the production of multi-dimensional computer generated images, said method performed on a computer, said method comprising the steps of:

prior to an occlusion or invisibility relationship computation (known per se) being carried out on a plurality of surfaces from each viewpoint to be calculated:

for selected ones of said surfaces, determining for said viewpoint whether each said selected surface is

- (a) an always unoccluded surface, an always hidden surface, or a remaining surface; or
- (b) an always unoccluded surface, or a remaining surface; or
- (c) an always hidden surface, or a remaining surface;

wherein said remaining surface is a surface which is unable to be determined with certainty as to whether it is either unoccluded or hidden;

exempting from said occlusion or invisibility relationship computation those surfaces which are either always unoccluded or always hidden;

maintaining a record of said remaining surface; and

carrying out occlusion or invisibility relationship computations on said remaining surfaces.

* * *

- 4. A method as claimed in Claim I, wherein said images are selected from a group consisting of graphic images, computer vision data, abstract data and physical data.
- 5. A method as claimed in Claim I, wherein the reduction in complexity involves a reduction in the number and/or visibility of visibility calculations.

(<u>Id.</u> Ex. A, 28:45-48, 28:53-58 (emphasis added).)

3D has now filed a motion for summary judgment requesting that "this Court issue an order declaring Claims 1, 4 and 5 of [the '679 Patent] and Claims 1 and 12 of [the '047 Patent] are invalid for failure to comply with the subject matter eligibility requirements of 35 U.S.C.

§ 101." (Mot. at iv.) In particular, 3D argues that the patents-in-suit fail to meet the "machine-or-transformation" set forth in <u>In re Bilski</u>, 545 F.3d 943 (Fed. Cir. 2008) (en banc), <u>cert. granted</u>, --- U.S. ---, 129 S.Ct. 2735 (2009) ("<u>Bilski</u>") in that the claims are not "tied to a particular machine" and do not "transform[] an article into a different state or thing." <u>Id.</u> Alternatively, 3D seeks to stay the action pending the United States Supreme Court's ruling on Bilski.¹

II. LEGAL STANDARD

Rule 56(c) of the Federal Rules of Civil Procedure authorizes summary judgment if there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986). The moving party bears the initial burden of demonstrating the basis for the motion and identifying the portions of the pleadings, depositions, answers to interrogatories, affidavits, and admissions on file that establish the absence of a triable issue of material fact. Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). If the moving party meets this initial burden, the burden then shifts to the non-moving party to present specific facts showing that there is a genuine issue for trial. Fed.R.Civ.P. 56(e); Celotex, 477 U.S. at 324; Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586-87 (1986).

An issue of fact is "material" if, under the substantive law of the case, resolution of the factual dispute might affect the outcome of the claim. See Anderson, 477 U.S. at 248. Factual disputes are genuine if they "properly can be resolved in favor of either party." Id. at 250. Accordingly, a genuine issue for trial exists if the non-movant presents evidence from which a reasonable jury, viewing the evidence in the light most favorable to that party, could resolve

plaintiff's proposed claim construction of terms in dispute).

¹ The claims construction hearing has not yet taken place, as the previously scheduled date conflicted with a criminal matter. Fuzzysharp suggests in its opposition that "the Court might want to wait until after the Court makes its Claims Construction Ruling" before proceeding with the instant motion. (Pl.'s Opp'n at 3.) Claims construction is not a prerequisite to ruling on the instant motion. However, as will be set forth below, the Court will construe the claims, if necessary, in the manner advocated by Fuzzysharp. See CyberSource Corp. v. Retail Decisions, Inc., 620 F. Supp. 2d 1068, 1073 (N.D. Cal. 2009) (ruling on motion for summary judgment based on the machine-or-transformation test under Bilski utilizing

the material issue in his or her favor. <u>Id.</u> "If the evidence is merely colorable, or is not significantly probative, summary judgment may be granted." <u>Id.</u> at 249-50 (internal citations omitted). Only admissible evidence may be considered in ruling on a motion for summary judgment. Fed.R.Civ.P. 56(e); <u>Orr v. Bank of Am.</u>, 285 F.3d 764, 773 (9th Cir. 2002).

III. DISCUSSION

The Patent Act provides that: "Whoever invents or discovers any new and useful *process*, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title." 35 U.S.C. § 101 (emphasis added). "Whether a claim is drawn to patent-eligible subject matter under § 101 is a threshold inquiry, and any claim of an application failing the requirements of § 101 must be rejected even if it meets all of the other legal requirements of patentability." Bilski, 545 F.3d at 950; Parker v. Flook, 437 U.S. 584, 593 (1978). The question of whether a claim satisfies the requirements of § 101 presents a question of law. Bilski, 545 F.3d at 951.

"The term 'process' means process, art, or method, and includes a new use of a known process, machine, manufacture, composition of matter, or materials." 35 U.S.C. § 100(b). The Federal Circuit has characterized this definition as "unhelpful' because the definition itself uses the term 'process." Prometheus Labs., Inc. v. Mayo Collaborative Servs., 581 F.3d 1336, 1342 (Fed. Cir. 2009). Thus, in Bilski, the Federal Circuit sought to clarify the applicable test for determining whether a process or method patent is patentable under section 101. The court began its analysis by observing that "the Supreme Court has held that the meaning of 'process' as used in § 101 is narrower than its ordinary meaning," and that "a claim is not a patent-eligible 'process' if it claims 'laws of nature, natural phenomena, [or] abstract ideas.'" Bilski, 545 F.3d at 952 (citing cases) (alterations in original). Following those principles, Bilski confirmed that the key issue in determining the patentability of a particular process is "whether a process claim is tailored narrowly enough to encompass only a particular application of a fundamental principle rather than to pre-empt the principle itself." Id. at 954. To answer that question, the court summarized the "definitive test" for patentability of a process claim as follows: "A claimed process is ... patent-eligible under § 101 if: (1) it is tied to a particular

machine or apparatus, or (2) it *transforms* a particular article into a different state or thing." <u>Bilski</u>, 545 F.3d at 961. The court added that "[t]he machine-or-transformation test has two further aspects: 'the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility,' and 'the involvement of the machine or transformation in the claimed process must not merely be insignificant extrasolution activity." <u>Prometheus Labs.</u>, 581 F.3d at 1342 (quoting <u>Bilski</u>, 545 F.3d at 961-62).

In the instant case, the parties dispute whether the patent claims meet the machine-ortransformation test under <u>Bilski</u>. 3D contends that the claims in the patents-in-suit are nothing more than "mathematical formulas and algorithms that fail <u>Bilski</u>'s machine-or-transformation test." Mot. at 4. Fuzzysharp concedes that its patent claims are *not* transformative, but nevertheless argues that they are tied to a particular machine; to wit, a computer. (Pl.'s Opp'n at 7-9.) As support, Fuzzysharp highlights language in the preamble of Claim 1 of the '047 Patent, which articulates "[a] method of reducing the indivisibility related computations in 3-D graphics,...." (Baker Decl. Ex. B at 27:66-67), as well as the reference in Claim 12 to "computer storage" (id. at 29:17). (Pl.'s Opp'n at 8 (emphasis in original).) Similarly, Fuzzysharp points to the parties' agreed upon construction of certain claim terms, which reference "using a data structure in a computer," along with a reference to projecting 3D images "on a computer screen." (Id. at 8 (emphasis in original).) According to Fuzzysharp, 3D's concurrence in these proposed constructions demonstrates that 3D previously agreed that "a device such as a computer is tied to the claims...." (Id. (citing Docket 43-2).)

Fuzzysharp's arguments miss the mark. The salient question is not whether the claims are tied to *a* computer. Rather, as <u>Bilski</u> makes clear, the question is whether the claims are "tied to *a particular machine*." 545 F.3d at 961 ("an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to *a particular machine*") (emphasis added). Aside from the passing reference to "computer storage," neither of the disputed claims in the '047 Patent make any reference to any machine or apparatus. As for the '679 Patent, the claims are not tied to a particular computer, but simply make a generally reference to "a" computer. Courts applying <u>Bilski</u> have concluded that the mere recitation of "computer" or

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reference to using a computer in a patent claim us insufficient to tie a patent claim to a particular machine. For example, in DealerTrack, Inc. v. Huber, -- F. Supp. 2d ---, 2009 WL 2020761 at *3 (C.D. Cal., July 07, 2009), the patent-in-suit pertained to a "computer aided method" of managing credit applications. The patentee argued that the claims in dispute were tied to a central processor "consisting of a specially programmed computer hardware and database" and a "remote application entry and display device," and a "remote funding source terminal device." Id. at *4 (emphasis added). In finding that the claim failed to meet the Bilski machine implementation test, the court noted that the claim "does not specify precisely how the computer hardware and database are 'specially programmed,' and the claimed central processor is nothing more than a general purpose computer that has been programmed in some unspecified manner." Id. at *4; see also CyberSource, 620 F. Supp. 2d at 1077 (claim which disclosed "[a] method for verifying the validity of a credit card transaction over the Internet" was not tied to a particular machine) (emphasis added).

Likewise, the PTO Board of Patent Appeals and Interferences has reached the same conclusion, and consistently ruled that the mere fact that a claim references the use of a computer is, standing alone, insufficient to meet the machine implementation requirement. See Ex Parte David Myr, 2009 WL 3006497 at * 8-9(Bd. Pat. App. & Interf., Sept. 18, 2009) ("computer-implemented" process for valuing real estate was not tied "to any particular computer" and therefore was not patentable under 35 U.S.C. § 101); Ex Parte Nick M. Mitchell and Gary S. Sevitsky, 2009 WL 460662 at *6 (Bd. Pat. App. & Interf., Feb. 23, 2009) ("the use of a general 'processor' and 'memory' is insufficient to render an otherwise ineligible claim patent eligible."); Ex Parte Sandeep Nawathe and Vaishali Angal, 2009 WL 327520 at *4 (Bd. Pat. App. & Interf., Feb. 9, 2009) ("We note that the recited method, while being computerized, is not tied to a particular machine for executing the claimed steps. We find that the

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 computerized recitation purports to a general purpose processor ..., as opposed to a particular computer specifically programmed for executing the steps of the claimed method.").²

The above authorities—none of which are addressed by Fuzzysharp—persuade the Court that the claims in dispute are *not* tied to any particular machine. The claim language clearly states that these claims are drawn to mathematical calculations and algorithms for calculating whether certain surfaces are visible or invisible in 3D computer graphics. This is exemplified by the language of the claims, which specify a sequence of calculations that involve "identifying," "comparing," "determining," and "ignoring" data. See Baker Decl. Ex. B, 27:66-28:16, 28:65-29:21. Though the calculations may be "performed on a computer," they are not tied to any *particular* computer. For these reasons, the claims of the '047 and '679 Patent fail to pass muster under the Bilski machine implementation test for patentability under 35 U.S.C. § 101. E.g., Research Corp. Techs. v. Microsoft Corp., 2009 WL 2413623 at *12 (D. Ariz., July 28, 2009) (granting summary judgment on ground that claim which involved use of "formulas and numbers to determine the placement of a dot [i.e., pixel] at a location" on a video display was "not tied to a particular machine); DealerTrack, 2009 WL at 2020671 at *4 (claim that disclosed a "computer-aided method" was not tied to a particular computer).³

² The Board of Patent Appeals and Interferences ("Board") has the authority to "review adverse decisions of examiners upon applications for patents...." 35 U.S.C. § 6(b). Fuzzysharp fails to address any of the Board decisions cited above and, without citation to any authority, simply dismisses those cases as having "no weight." (Opp'n at 7.) However, although Board decisions are not binding, they nonetheless may be considered persuasive authority. See Noelle v. Lederman, 355 F.3d 1343, 1350 (Fed. Cir. 2004).

³ Finally, even if the patent claims were tied to a particular machine, the reference to "computer" does not impose any meaningful limit on the claim scope, as the computer merely serves to perform the computation. <u>Bilski</u>, 545 F.3d at 961; <u>Cybersource Corp.</u>, 620 F. Supp. 2d at 1077-1078. Tellingly, Fuzzysharp's opposition offers no meaningful response to this point. (Pl.'s Opp'n at 8-9.)

| 1 | IV. | CONCLUSION | |
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| 2 | For the reasons stated above, | | |
| 3 | IT IS HEREBY ORDERED THAT Defendant's Motion for Summary Judgment of | | |
| 4 | Invalidity under 35 U.S.C. § 101 for Non-Patentable Subject Matter (Docket 60) is | | |
| 5 | GRANTED. Judgment shall be entered accordingly. | | |
| 6 | | IT IS SO ORDERED. | |
| 7 | Dated | d: December 11, 2009 | Saundra B Grosting |
| 8 | | | AUNDRA BROWN ARMSTRONG United States District Judge |
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